FINAL PERMIT APPLICATION

SANPETE COUNTY CLASS IVB LANDFILL

NEAR CHESTER, UTAH

Prepared for

Sanpete Sanitary Landfill Cooperative

Date:

November 2003

By:

Gary F. Player
Utah Professional Geologist No. 5280804-2250

1671 W 546 S
Cedar City, Utah 84720

(435) 867 5637

INTRODUCTION

Over the last two decades changes in federal law, specifically Subtitle D of the Resource Conservation and Recover Act, have mandated that all landfills be designed to protect the ground water, the environment, and the public health. Individual states were given the mandate to draft and enforce their own regulations under the approval of the Environmental Protection Agency.

Faced with the high costs associated with bringing their facilities into compliance with Subtitle D and the Utah Administrative Code (UAC), the Sanpete Sanitary Landfill Cooperative decided to close its existing Class II Landfill near Chester. The facility stopped accepting municipal solid waste in 2001, and has been replaced by a new Class I Landfill at the White Hills.

Sanpete County will now construct a Class IVb Landfill at unused portions of the old Class II Landfill site. A Class IVb Landfill is a restricted variety of a Class IV Landfill that receives, based on an annual average, 20 tons, or less, of waste per day; **or** demonstrates that no conditionally exempt small quantity generator hazardous waste is accepted. A Class IVb Landfill is exempt from ground water monitoring.

Final cover will be placed over the Class II Municipal solid waste facility, and the County will construct a new Class IVb Landfill just north and east of the closed Sanpete County Class II Landfill. This permit application provides the information needed to open the Class IVb facility operating in compliance with UAC.

TABLE OF CONTENTS

Page

INTRODUCTION ii
TABLE OF CONTENTS iii
APPENDIX iv
ATTACHMENTS iv

PART I - GENERAL DATA 2

PART II - GENERAL REPORT 4
2.1 GENERAL DESCRIPTION 4
2.2 RELATIONSHIP TO THE SOLID WASTE MANAGEMENT PLAN 4
2.3 LEGAL DESCRIPTION 5
Sanpete County Tract 27207X 5
Sanpete County Tract 27038 5
2.4 PLAN OF OPERATION 6
2.4.1 Schedule of Construction 6
2.4.2 Solid Waste Handling Procedures 6
2.4.3 Contingency Plans in the Event of Fire 9
2.4.4 Alternative Waste Handling and Disposal 9
2.4.5 Procedure For Excluding Prohibited Waste and PCBs 10
2.4.5.1 Waste Screening 10
2.4.5.2 Waste Screening Procedure 11
2.4.5.3 Procedures for Refusing and Removing Wastes 12
2.4.5.4 Hazardous Wastes Discovered After the Fact 13
2.4.5.5 Procedures for Minimizing the Size of the Working Face 13
2.4.6 Vector Control Program 14
2.4.7 Safety Program 14
2.4.7.1 Fire Prevention 14
2.4.7.2 Operator Training 14
2.5 INSPECTIONS AND RECORD KEEPING 14
2.5.1 Inspections 14
2.5.2 Record Location 15
2.5.3 Reporting 15
2.6 CLOSURE PLAN 16
2.6.1 Closure Schedule and Landfill Capacity 16
2.6.2 Notification 17
2.6.3 Final Inspection 17
2.6.4 Record of Title, Land Use, and Zoning Restrictions 18
2.7 POST-CLOSURE PLAN 18
2.7.1 Corrective Action Program if Ground Water is Contaminated 18

TABLE OF CONTENTS (continued)

Page

2.8 COST ESTIMATES AND FINANCIAL ASSURANCE 19
2.8.1 Closure Costs 19
2.8.2 Post-Closure Costs 23
2.8.3 Financial Assurance Mechanism 24

PART III - TECHNICAL DATA 25
3.1 DESCRIPTION OF SITE VICINITY 25
3.1.1 Location Standards 25
3.1.1.1 Floodplains 25
3.1.1.2 Wetlands 25
3.1.1.3 Water Levels 25
3.2 ENGINEERING CONSIDERATIONS 26
3.2.1 Foundation Design Underlying the Facility 26
3.2.2 Trench Design 26
3.2.3 Run-On/Run-Off Protection 26
3.2.3.1 Run-on Protection 26
3.2.3.2 Run-Off Protection 28
3.2.3.2 Contingency Plan for Failure of Run-Off Containment System . 28
3.2.4 Fugitive Dust Control 29
3.2.5 Closure Requirements 29

APPENDIX

Engineering Properties of Site Soils

ATTACHMENTS

1 FIGURES
2 PROOF OF OWNERSHIP
3 DAILY LOG
4 RANDOM LOAD INSPECTION RECORD
5 INSPECTION FORMS and SIGNATURE LOG
6 ANNUAL REPORT FORM
7 THIRD-PARTY CLOSURE COSTS ESTIMATES
8 USGS MAP

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF SOLID AND HAZARDOUS WASTE

APPLICATION FOR A PERMIT TO OPERATE A CLASS IVb LANDFILL

The applicant, Sanpete Sanitary Landfill Cooperative, herein submits, in duplicate, an original permit application, a general report, and a technical report to:

Dennis R. Downs, Director
Division of Solid and Hazardous Waste
Utah Department of Environmental Quality
PO Box 144880
Salt Lake City, Utah 84114-4880

PART I - GENERAL DATA

1. Name of Facility: Chester Class IVb Landfill
2. Site Location: Approximately 5 miles north of Ephraim along U.S. Highway 89, in the southwest quarter of the southeast quarter of section 2, and the northwest quarter of the northeast quarter of section 11, both in T. 16 S., R. 3 E., SLBM
3. Facility Owner: Sanpete Sanitary Landfill Cooperative
4. Facility Operator: Larry Hansen
5. Contact Person: Douglas Bjerregaard, Chairman of the Landfill Board

   Address: 111 N 100 W
   Box 7
   Mayfield, Utah 84643

   Telephone: (435) 528 3255

6. Type of Facility: This Landfill will be operated as a "nonprofit" landfill.

   (x) Non-Commercial
   ( ) Commercial

   (x) Initial Application
   ( ) Permit Renewal
   Original Permit Number _____

7. Property Ownership

   (x) Presently owned by applicant

   Property owner (if different from applicant)

   Name: same

   Address: _____

   Telephone: _____

8. Certification of submitted information.

Douglas Bjerregaard — (Name of Official)

Chairman, Landfill Board — (Title)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Douglas Bjerregaard Date: 11/18/03

SUBSCRIBED AND SWORN to This 18th day of November, 2003.

My commission expires on the 10th day of July, 2006.

Catherine Bartholomew
Notary Public in and for

(SEAL) Sanpete County, Utah.

Catherine Bartholomew
Notary Public
State of Utah
My Commission Expires July 10, 2006
126 East Canyon Rd, Mayfield, Ut 84643

PART II - GENERAL REPORT

2.1 GENERAL DESCRIPTION

The following is a general description of the proposed Class IVb Landfill, including the types of wastes to be received and handled, and the area served by the facility.

Sanpete Sanitary Landfill Cooperative will operate a Class IVb Landfill for the exclusive use of Sanpete County and its residents. The facility will be open one day per week yearround, two days per week from April 1 through November 1, and by appointment. The initial plan is to be open six (6) hours per day, and the schedule will be adjusted to meet demand. The Landfill is expected to accept less than 20 tons per day.

The County owns approximately 70 acres which have been zoned PF (Public Facilities) for use as a Landfill. Approximately 22 of those acres will comprise the active portion of the Class IVb facility. The remaining acreage is reserved for future use and as a buffer zone; the entire property is fenced. A gated access road leads to the Landfill from the east.

The types of wastes accepted at this facility include construction/demolition waste, yard waste, inert waste, appliances, tires, and car bodies. A small area has been set aside for temporary storage of appliances and car bodies. The layout of the facility is shown on the facility map (see Attachment 1, Figure 1 - Facility Map).

The responsible party for overseeing the operation of the facility is the Sanpete Sanitary Landfill Contractor, Mr. Larry Hansen. The Class IVb facility will have a staff consisting of one part-time Landfill Operator to run equipment and screen waste until the amount of waste received warrants more employees. The Landfill Operator will report to the Landfill Contractor. The entire operation is overseen by the Landfill Contractor, who reports to the Sanpete Sanitary Landfill Cooperative (Coop).

2.2 RELATIONSHIP TO THE SOLID WASTE MANAGEMENT PLAN

The Sanpete County Solid Waste Management Plan (SWMP), as adopted on July 1, 1993, states

> *"Sanpete County has chosen landfilling as the solid waste management tool it will use for the next twenty years. We have chosen this method of solid waste management because of the availability of landfill space. Our communities are widely spread throughout the County and this method is by far the most economical and feasible method available at this time.".*

The Class II Municipal solid waste facility will be closed, and the site will be developed for use as a Class IVb facility. The County has determined it can best serve the community by providing for a local facility to handle its construction/demolition (C/D) waste and yard waste. A local facility to handle bulky waste is necessary to prevent illegal dumping in nearby deserts and agricultural lands. Fees will be charged to all commercial Landfill users.

The feasibility of reducing waste volumes through composting is currently under consideration.

2.3 LEGAL DESCRIPTION

The Coop owns two parcels of land for use as the Class IVb Landfill. The parcels are described as follows:

Sanpete County Tract 27207X
Beginning at the Southwest Corner of the Northeast Quarter of the Northeast Quarter of Section 11, T. 16 S., R. 3 E., of the Salt Lake Base and Meridian; running thence North 20 chains to the North line of said section; thence East 13.37 chains more or less to the East side of the State Highway (89); thence Southwesterly along the East side of the Highway to a point on the "forty" line East of the point of beginning; thence West to the point of beginning. LESS HIGHWAY.

Sanpete County Tract 27038
Beginning at the Northwest corner of the East half of the Southeast quarter of the Southwest quarter of Section 2, T. 16 S., R. 3 E., Salt Lake Base and Meridian; thence East 660 feet, thence South 1,105.50 feet, thence East 2,200 feet, more or less, to the West side of the State Highway (89), thence Southwesterly along the State Highway right of way 231.34 feet, more or less, to the South section line of Section 2, thence West 793.34 feet, more or less, to the 1/16th Section line, thence South 1,320 feet, thence West 1,320 feet, thence North 1,320 feet, thence West 660 feet, thence North 1,320 feet to the point of beginning. Being in Sections 2 and 11, T. 16 S., R. 3 E., Salt Lake Base and Meridian.

EXCEPTING THEREFROM 90% of all oil, gas and/or other minerals in, on or under said land, together with the right of ingress and egress for the purpose of exploring for and/or removing the same.

Subject to easements, reservations and restrictions of record or in operation of law and equity.

Copies of the deeds for each parcel are provided as Attachment 2.

2.4 PLAN OF OPERATION

In accordance with UAC, copies of this Plan of Operation will be kept on file at the Coop's Class I Landfill office in the White Hills near Mayfield, Utah.

2.4.1 Schedule of Construction

The Class IVb facility will be built just north and east of the closed Class II Landfill. The Coop stopped accepting municipal waste at the Class II Landfill on or about June 30, 2001, and final cover will be applied to all of the municipal waste cells. The site will be graded and filled. Drainage structures will be built at the closed Landfill, where necessary, to provide run-on control for the closed Class II Landfill and the new Class IVb facility.

The new facility will use existing access roads, and the property is now fenced and gated. Initially, waste will be placed in trenches to be excavated in natural soils north of the closed Municipal solid waste Landfill.

The Class IVb Landfill opened in the Summer of 2001, operating in conformance with a permit application submitted to the Utah Division of Solid and Hazardous Waste in April of 2001.

2.4.2 Solid Waste Handling Procedures

The facility will be open year round on Saturdays from 10:00 a.m. to 4:00 p.m. Additional summer hours (April 1 through November 1) will include Wednesdays from10:00 a.m. to 4:00 p.m. The following information will be posted at the gate:

CHESTER CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL
Property of Sanpete Sanitary Landfill Cooperative

Hours of Operation:
Saturday 10:00 a.m. to 4:00 p.m.
And
April 1 through November 1 only:
Wednesday 10:00 a.m. to 4:00 p.m.

Closed All Other Days, Except by Appointment

- HOUSEHOLD WASTES ARE PROHIBITED
- DUMP ONLY IN DESIGNATED AREAS
- SCAVENGING IS STRICTLY FORBIDDEN
- LIQUIDS AND HAZARDOUS MATERIALS ARE PROHIBITED
- FURNITURE AND STYROFOAM ARE PROHIBITED

IN CASE OF EMERGENCY, CONTACT:

Larry Hansen, Solid Waste Management Contractor
Office: (435) 427-3815 Home: (435) 427-3812
OR
Sanpete County Health Department (435) 462-2449

Equipment to operate the facility will include a rubber tired Michigan 125 front end loader and an 1150 Case Crawler. The equipment may be shared with the Coop's Class I Landfill west of Mayfield.

The facility will accept construction/demolition waste, yard waste, and inert waste for landfilling. Appliances and car bodies will be accepted for storage until such time as they are removed by a salvage operator or recycler. The waste storage and recycling areas will be separated from the active portion of the Class IVb facility by the access road.

The following is a description of on-site solid waste handling procedures:

1. All incoming vehicles will be met at the gate by the Landfill Operator. A description of the vehicle and its load will be recorded in the Daily Log, including

2. All materials brought into the site will be placed in the designated areas, as outlined below, at the time they are brought in.

3. Appliances

   i. Appliances will be stored in a separate area of the Landfill near the entrance.
   ii. Appliances will be recycled periodically by a contract salvage company. The salvage company will be selected by the Coop. If for some reason removal for recycling is impossible by September of each year, the appliances may be transported to the Class I Landfill. A notation will be made in the log books of both facilities.

4. Tires

   The Landfill will accept small quantities of tires, a maximum of four tires per hauler. Tires may be stored in an isolated area of the Landfill until a licensed tire recycler can pick them up. Alternatively, tires may be buried in an active Landfill cell.

   The tire recycler will be selected in accordance with the Utah Waste Tire Recycling Act of 1995, Section 26-32a-107.7. Detailed records will be kept showing the number of tires, the date of pick up, and the name and license number of the receiving tire recycler.

5. Junk Cars

   i. All fluids, batteries, and tires must be removed before a junk car can be accepted.

   ii. Clear title from the State of Utah or a dismantlement permit will be required before acceptance.

   iii. Junk cars will be recycled periodically by a contract salvage company. The salvage company will be selected by the Coop. If for some reason removal for recycling is impossible by September of each year, the junk cars will be transported to a salvage yard. A notation will be made in the log books of both facilities.

6. Construction Debris

   All construction/demolition waste that can be accepted at the site will be placed in an active disposal cell. Imported soil and other materials suitable for use as cover or fill material may be stockpiled.

7. Yard Waste

   Yard waste will be stockpiled for either permitted burning, or buried in an active disposal cell and covered with six inches of soil as needed to prevent a fire hazard.

8. Scavenging is prohibited.

2.4.3 Contingency Plans in the Event of Fire or Release of Explosive Gases

In the event of an accidental fire or explosion, two fire extinguishers will be kept at the site: one on the front end loader and one in the operator's truck. If the fire cannot be extinguished or smothered with dirt, the operator will call 911 or radio for help. The Landfill Operator will immediately notify the Landfill Contractor's office of the situation.

If a release of explosive gases is detected by some other means than the observation of a fire or explosion, the Landfill gate will be closed. All personnel shall be evacuated from the Landfill, and the operator will call 911 or radio for help.

If for some reason the radio is not working, the Landfill Operator will close the Landfill gate and go personally to the fire department to raise the alarm. The fire department is located approximately 5 miles from the Landfill at 625 S 100 E in Ephraim.

Before departing, the operator will evacuate all personnel from the Landfill. The Operator will not leave the vicinity except when safety is paramount, or unless directed to leave by the fire department. The fire chief will be made aware of the type of waste that is on fire and any hazards that may be encountered.

The Landfill Contractor, the Coop, and the UDEQ must be notified of landfill fires and explosive gas emissions immediately. A written report will be submitted to the UDEQ within 14 days of the event.

EMERGENCY TELEPHONE NUMBERS	
Facility	**Number**
Larry Hansen, SWM Contractor	(435)427-3812 (Home) (435)427-3815 (Store)
George Johansen, Health Department	(435) 462-2449
Sheriff's Office Highway Patrol	(435) 835-2191 (435) 896-2780
Fred Johnson, County Fire Marshall	(435) 835-2191

2.4.4 Alternative Waste Handling and Disposal

During periods when the facility is not able to accept and dispose of wastes (in case of equipment breakdown or other unforeseen events), Class IVb waste materials can be stockpiled on the site. If required by regulation, waste can be transported to the Sanpete County Class I Landfill.

Dead animals will generally be routed to the Class I Landfill, but can be accepted by the Class IVb facility operator when unforeseen conditions require such acceptance. If it is impossible for either the Class I or the Class IVb Landfill to accept them, dead animals shall be deposited into an excavated dead animal pit and covered daily with a minimum of six inches of earth to minimize odors and the propagation and harborage of rodents or insects.

2.4.5 Procedure for Excluding Prohibited Waste and PCBs

The Sanpete County Class IVb facility is designed only to accept inert waste, construction/demolition waste, and yard waste for landfilling . The facility will temporarily store appliances and car bodies for recycling outside the active Landfill trench boundaries.

Wastes will only be accepted when an operator is on duty. The Landfill Operator will meet all vehicles at the gate and each load will be visually inspected. The facility will be fenced and locked to deny access whenever the operator is not there.

2.4.5.1 Waste Screening

This facility is expected to accept less than 20 tons (approximately one ton per truck load) each day. Minimum random waste screening will be performed: at least one (1) truck load per week will be screened. However, more frequent random inspections of incoming loads may be conducted according to the schedule determined by the Landfill Contractor.

The Solid Waste Association of North America (SWANA) recommends that one load per week be considered the minimum effort required to show a good faith effort at a municipal solid waste facility.

The Random Waste Screening form will be used to document all random inspections (a copy of the form has been provided as Attachment 4). The load will be refused if any prohibited or suspicious wastes are found. The operator will screen for and refuse to accept the following materials:

- household garbage or materials other than construction/demolition waste, inert waste, or yard waste (except for appliances and car bodies which may be stored temporarily);
- asbestos or asbestos contaminated materials;
- contaminated soils or tanks resulting from remediation or clean up of any release or spill;
- waste paints, solvents, sealers, adhesives or similarly hazardous or potentially hazardous materials;
- liquids or containers (including drums) that have been used to contain liquids;
- hazardous waste and waste that contains or is labeled with stickers, signs, or other markings indicating the presence of radioactive or other hazardous materials;
- sludge and septage;
- batteries;
- dead animals, except when conditions require such acceptance;
- medical wastes (usually enclosed in red bags); and
- wastes that may be contaminated with PCBs, including electric transformers and lubricating oils.

2.4.5.2 Waste Screening Procedure

Waste screening will be conducted as follows:

1) The driver will be directed to the waste screening area near the active cell. Unauthorized personnel will not be allowed to enter the area.

2) The waste screening form will be completed.

3) Protective gear will be worn (gloves, goggles, and a hard hat).

4) The material will be spread with the loader or hand tools and examined visually. Suspicious markings or materials, like those listed above, will be carefully investigated further.

5) The Sheriff's Department will be called if unstable wastes that cannot be handled safely or radioactive wastes are discovered or suspected. Proper notifications as outlined in the section for refusing waste (see below) will be made if any hazardous wastes are discovered.

If the wastes are deemed acceptable for either landfilling or temporary storage, as defined in the permit, the wastes will be transported to the appropriate area.

Once the load has been paid for, a receipt will be given to the driver before he leaves the Landfill.

2.4.5.3 Procedures for Refusing and Removing Wastes

Should nonhazardous prohibited wastes, or other wastes unacceptable for landfilling at a Class IVb facility (such as household garbage), be discovered either during random waste screening or during placement in the Landfill unit, the following options will be utilized to remove these wastes from the Landfill:

1) Wastes can be loaded back onto the hauler's vehicle. The hauler will be informed of proper disposal options;

2) If the hauler or generator is no longer on the premises and is known, he or she will be asked to retrieve the waste and given information on proper disposal; or

3) The County can transport the waste to the Class I facility and bill the original hauler/generator.

If the operator feels that the load contains hazardous wastes or PCBs, he will notify the proper authorities (County Sheriff Department, County Health Department, UDEQ, and Highway Patrol).

The operator will make a notation in the waste screening form and logbook of all loads turned away and why they were turned away. The operator will also notify the Landfill Contractor.

2.4.5.4 Hazardous Wastes Discovered After the Fact

If hazardous wastes or wastes containing PCBs are discovered to have been inadvertently accepted (i.e., once the hauler has left the premises) the procedure below will be followed:

1) Access to the area will be restricted.

2) The situation will be carefully assessed. The Sheriff's Department will be called if unstable wastes that cannot be handled safely or radioactive wastes are discovered or suspected. Proper notifications as outlined in the section for refusing waste, see above, will be made if any hazardous wastes are discovered.

3) If the waste can be safely moved, the equipment operator will transport it to a secure zone.

4) The Landfill Contractor will be contacted about further disposition of the waste.

5) The hauler, and the generator (if known) will be notified within 24 hours of the discovery. The generator will be responsible for proper cleanup, transport, and disposal of the waste.

6) A record will be made of the discovery, handling, and disposition of any hazardous wastes, including notification of the authorities and the hauler/generator. A copy of this record will be sent to the UDEQ within 14 days of the incident.

2.4.5.5 Procedures for Minimizing the Size of the Working Face and Fire Hazards

The width of the working face will be restricted by the width of the disposal trenches. All waste will be placed in trenches 150 feet wide, and 15 to 20 feet deep. The working face will further be restricted by placing waste in areas approximately 50 feet wide by 50 feet long. Waste will be compacted and the trench filled to the surface before the adjacent area receives waste. Once a 50 feet by 50 feet area of the trench is filled to the surface, the waste will be covered with at least six (6) inches of cover soils in order to prevent a fire hazard.

2.4.6 Vector Control Program

A Class IVb facility provides little in the way of food sources, and there is usually no standing water at the facility. However, bulky items may provide a habitat for rodents. All recyclable material will be removed from the site at least once a year. If a problem arises with vector populations, the operator will call a professional exterminator and make the necessary arrangements for moving the offending material. If the infested materials cannot be removed from the Landfill, they will be moved to an active cell and covered.

2.4.7 Safety Program

2.4.7.1 Fire Prevention

Any combustible materials, except yard waste stored for permitted burning, will be covered as needed to avoid a fire hazard.

2.4.7.2 Operator Training

Adequate training will be provided to ensure that each employee complies with the approved "Plan of Operation" and the "Permit." Refresher training will be provided as needed to ensure continued compliance within the approved "Plan of Operation" and "Permit." Certificates of completion will be kept on file with personnel records.

All employees and managers of the Landfill must read the approved "Plan of Operation" and "Permit" documents prior to beginning work at the facility. Each employee or manager shall sign a Signature Log certifying that he or she has read the required documents. A copy of the Signature Log is included in Attachment 5.

2.5 INSPECTIONS AND RECORD KEEPING

2.5.1 Inspections

Routine inspections are necessary to prevent malfunctions and deterioration, operator errors, and discharges which may cause or lead to release of wastes to the environment or to a threat to human health. Inspections will be performed weekly and quarterly as described below:

1) The Landfill Operator will conduct a weekly walkthrough inspection and will document the condition of facility as follows:

   a) fences and gates,
   b) access roads,
   c) run-off control system,
   d) litter and weed control,
   e) waste piles/depressions,
   f) appliance and car body storage area.

The inspection form will be dated, the time of the inspection noted, and the form signed by the operator. The operator will include notations of observations made and the date and nature of any repairs or corrective action.

2) A complete inspection will be done quarterly by the Landfill Contractor. Anything not meeting with the inspector's approval will be described in writing and will be given to the operator to correct.

A sample of the form used to document these inspections is included in Attachment 5.

2.5.2 Record Location

The Cooperative or the Contract Operator shall maintain and keep, on-site, the following permanent records: (a) a daily log or operating record, to be completed at the end of each day of operation, that shall contain (I) the weights or volumes accepted, number of vehicles entering, and if available, the types of wastes received each day; (ii) deviations from the approved plan of operation; (iii) training and notification procedures; (iv) an inspection log or summary.

The Cooperative or the Contract Operator shall maintain and keep at the White Hills Landfill office near Mayfield, Utah, or the Cooperative's office in Mayfield, Utah (b) other records to include (I) documentation of any demonstration made with respect to any location standard or exemption; (ii) closure and post-closure care plans as required by Subsections R315-302-3(4) and (7); (iii) cost estimates and financial assurance documentation as required by Subsection R315-309-2(3); and (iv) other information pertaining to operation, maintenance, monitoring, or inspections as may be required by the Executive Secretary.

2.5.3 Reporting

The Sanpete Sanitary Landfill Cooperative, as the owner of the facility, will be required to submit an annual report to the Executive Secretary by March 1 of each year for the most recent calendar year of operation. A sample of the annual reporting form which may be used is found in Appendix F of the UAC and has been provided as Attachment 6.

The annual report must include the following information:

1) Name and address of the facility;

2) Calendar year covered by the report;

3) Annual quantity, in tons, or volume in cubic yards, and estimated in-place density in pounds per cubic yard of solid waste handled, including recycling of appliances and car bodies;

4) The annual update of the required financial assurance mechanism; and

3) Annual quantity, in tons, or volume in cubic yards, and estimated in-place density in pounds per cubic yard of solid waste handled, including recycling of appliances and car bodies;

4) The annual update of the required financial assurance mechanism; and

5) Training programs or procedures completed.

In accordance with the UAC, the Coop will apply for a renewal of the facility's permit every five years.

2.6 CLOSURE PLAN

2.6.1 Closure Schedule and Landfill Capacity

Each Landfill trench will be covered and closed as soon as the next trench has been prepared for use. Each trench will be approximately 20 feet deep, 150 feet wide at the top, 140 feet wide at the base, and 300 feet long, with a surface area of approximately one acre. The capacity of all 20 trenches, reduced by 10 percent for occasional cover, will be 580,000 cubic yards.

Using an average weight for compacted construction debris of 1,000 pounds per cubic yard, the total Landfill capacity is about 290,000 tons.

Based on the projected usage of 40 tons per week, the available capacity in trenches one through 20 will enable the Landfill to remain open for approximately 139 years. Since the Landfill will be open for such a long period of time, each trench will be covered and revegetated when it is filled.

Trenches used for the disposal of non-recyclable waste will be excavated in undisturbed ground. Shallow, fine-grained soils removed from the first Class IVb trenches prior to the placement of waste will be used as final cover for the old Class II Municipal solid waste prism. Remaining, coarse-grained, surplus soils will be stored in berms along the west, east, north, and south boundaries of the active Landfill. The berms will stop precipitation from running onto or out of the active Landfill while one or more trenches are open.

After closure of the Class II Landfill, soils for use as occasional cover materials in an active Class IVb trench will be excavated from the area of the adjacent future trench. In the unlikely event that the Landfill is abandoned at a time when an active trench has received waste, but has not been closed, soils from the adjacent future trench may be used to close the active trench.

If sufficient undisturbed soils are not present in an adjacent future trench, soils may be retrieved from the soil storage berm(s) along the perimeter of the Landfill. In no case will the berms be reduced in size enough to allow precipitation to run-on to the closed Landfill. The minimum size

Because of this restriction, some areas will receive final cover before final closure of the entire Landfill. These areas will include the top and side slopes of each filled trench. The side slopes of final cover over the closed trenches shall not be greater than 3:1, horizontal to vertical. Slopes along the top of each closed trench shall not be less than two (2) percent.

The sizes of the area potentially requiring final cover before closure of the entire Landfill will be reported quarterly to the SWM Contractor, so that areas of landfilling can be adjusted to place waste over "aging" intermediate cover.

The proposed sequencing of the trenches to receive waste materials and subsequent closure is shown on Figures 1 and 2.

Sequential partial closure will be conducted by the Landfill Operator using borrow materials readily available on the site as part of normal operations. Therefore, no fund withdrawals are planned from the financial assurance mechanism during the active life of the Landfill.

2.6.2 Notification

The Coop will notify the Executive Secretary of the intent to implement closure of a unit or a facility 60 days prior to the projected final receipt of waste. The Coop will then commence implementation of the closure 30 days after receipt of the final waste load, with the closure activities to be completed within 180 days from the initiation of the closure activities.

2.6.3 Final Inspection

In accordance with UAC R315-302-3 (5)(a) and (b) the owner and operator will notify the Executive Secretary of the intent to implement the closure plan in whole or part, 60 days prior to the projected final receipt of waste at the facility. Final closure activities will begin within 30 days after receipt of the final volume of waste and will be completed within 180 days from their starting time.

Under current regulations, when facility closure is completed, closure plan sheets signed by a professional engineer registered in the state of Utah and modified as necessary to represent as-built changes to final closure construction are required to be presented to the Executive Secretary.

Additionally, certification by the owner and a professional engineer that the site has been closed in accordance with the approved closure plan will be presented to the Executive Secretary.

However, the UDEQ may consider changes to these requirements as they apply to Class IVb landfills and this section should be reviewed and existing regulations incorporated when the permit is updated every five years.

Additionally, certification by the owner and a professional engineer that the site has been closed in accordance with the approved closure plan will be presented to the Executive Secretary.

However, the UDEQ may consider changes to these requirements as they apply to Class IVb landfills and this section should be reviewed and existing regulations incorporated when the permit is updated every five years.

2.6.4 Record of Title, Land Use, and Zoning Restrictions

The closed Landfill will be rezoned, if necessary, to conform to local regulations after closure. A description of the Landfill history and filled areas will be permanently appended to the record of title no later than 60 days after certification of closure. Proof of the recording will be provided to the Executive Secretary. Land use restrictions will be assigned that conform to existing regulations for closed landfills at the time of closure.

2.7 POST-CLOSURE PLAN

Post-closure care is required for a period of 30 years or as long as the Executive Secretary determines is necessary for the facility to become stabilized and to protect the human health and the environment. When post-closure activities are complete, as determined by the Executive Secretary, the Coop will submit a certification to the Executive Secretary, signed by the owner and a professional engineer registered in the state of Utah, stating why post-closure activities are no longer necessary (i.e., little or no settlement, gas production, or leachate generation).

Because Class IVb landfills are exempt from ground water monitoring, leachate control, and gas monitoring requirements, post-closure care will primarily consist of semiannual inspections to ensure cover integrity and the security of the facility. Annual post-closure expenditures are detailed in Section 2.8.2 of this permit application.

2.7.1 Corrective Action Program if Ground Water is Contaminated

Contamination of ground water is unlikely because of the inert nature of the waste to be received at the Class IVb Landfill. However, in the event that ground water contamination is suspected, samples will be collected from monitor wells previously constructed at the site by Bingham Engineering in 1995. If analyses of the water show that contamination has occurred, the water will be pumped and treated according to a plan prepared by the Coop and approved by the UDSHW.

The Sanpete Sanitary Landfill Cooperative will serve as the point of contact during the post-closure period at the address and phone number as follows:

111 N 100 W, Box 7, Mayfield, Utah 84643
(435) 528 3255

2.8 COST ESTIMATES AND FINANCIAL ASSURANCE

2.8.1 Closure Costs

The cost estimates for closure are based on a third party performing closure. Estimated costs must be based on the cost to close the largest area of the disposal facility or unit ever requiring a final cover. As outlined in Section 2.6, Closure Plan, the only areas requiring final cover will be one Landfill trench. The covered areas will then be seeded with natural vegetation.

The active surface area of the Landfill (that portion that has not received final cover) will never be larger than 1.5 acres (7,260 square yards). That is the approximate surface area of one active trench and one half (½) of one adjacent trench that is being used as a source for cover materials. This restriction will limit the area that would require closure by a third party if the Co-op were to relinquish operation of the Landfill.

Because of this restriction, some areas will receive final cover before final closure of the entire Landfill. These areas will include the top and side slopes of each filled trench. The side slopes of final cover over the closed trenches shall not be greater than 3:1, horizontal to vertical. Slopes along the top of each closed trench shall not be less than two (2) percent.

Each full trench will be closed with an additional two feet of loosely compacted, sandy soil. The soil will be compacted by the rubber tired or tracked vehicle(s) that are used to place the final cover soil. The uppermost six (6) inches of final cover soil shall be capable, when fertilized, of supporting native vegetation as an "Erosion Layer."

The amount of final cover to be placed on each acre of Landfill trench is equal to two (2) feet times the surface area of one trench (45,000 square feet).

Solving: 2 X 45,000 = 90,000 cubic feet, or 3,333 cubic yards.

The amount of soil sufficient to cover one and one half (1 ½) trenches is 5,000 cubic yards.

The Estimated Closing Costs shown on Lines 2.2.1a and 2.3 of Table 2 include the costs for placing 18" of closure soil (3,750 cubic yards), and 6" of Erosion Layer soil (1,250 cubic yards), for a total of 24" of final closure soil.

Closure costs are estimated at $39,042.94 (see Table 2, below). This figure is based on grading and seeding one Landfill trench with a surface area of 1.5 acres.

Approximately 3,750 cubic yards of soil will be needed to cover 1.5 acres to a depth of 18 inches. Covering this same area with an additional 6 inches of topsoil will require approximately 1,250 cubic yards of soil. Both the cover material and topsoil will be obtained from County material sites, so that the only costs incurred will be those to place and grade the material.

A cost estimate for placing final cover and reseeding was obtained from Jensen Construction and is provided as Attachment 7.

TABLE 2: ESTIMATED CLOSURE COSTS

ITEM	UNIT MEASURE	COST/UNIT	NO. UNITS	TOTAL COST
1.0 Engineering				
1.1 Topographic Survey	--	--	--	0.00
1.2 Boundary Survey for Affidavit	Hours	65.00	24	1,560.00
1.3 Site Evaluation	Hours	65.00	8	520.00
1.4 Development of Plans	Hours	65.00	8	520.00
1.5 Contract Administration, Bidding and Award	Hours	35.00	8	280.00
1.6 Administrative Cost for the Certification of Final Cover and Affidavit to the Public	Hours	65.00	4	260.00
1.7 Project Management; Construction Observation and Testing	Hours	50.00	16	800.00
1.8 Monitor Well Construction Cost				N/A
1.9 NPDES Construction Storm Water Permit, and other Permits				N/A
SUBTOTAL				**3,940.00**
10% CONTINGENCY				**394.00**
ENGINEERING TOTAL				**4,334.00**

ITEM	UNIT MEASURE	COST/UNIT	NO. UNITS	TOTAL COST
2.0 Construction				
2.1 Final Cover System				
2.1.1 Completion of Sidewall Liner	N/A	--	--	N/A
2.1.1a Soil Placement	N/A	--	--	N/A
2.1.1b Soil Processing	N/A	--	--	N/A
2.1.1c Soil Amendment	N/A	--	--	N/A
2.1.1d Soil Purchase	N/A	--	--	N/A
2.1.1e Transportation	N/A	--	--	N/A
2.1.2 Drainage Layer on Sidewall	N/A	--	--	N/A
2.1.2a Geotextile Filter Fabric	N/A	--	--	N/A
2.1.2b Geonet/Geotextile Composite	N/A	--	--	N/A
2.1.2c Geomembrane Sidewall Liner	N/A	--	--	N/A
2.2 Completion of Top Cover				
2.2.1 Infiltration Layer	N/A	--	--	0.00
2.2.1a Soil Placement	cu yards	2.5	3,750	9,375.00
2.2.1b Soil Processing	acre	20.00	1.5	30.00
2.2.1c Soil Amendment	acre	--	--	N/A
2.2.1d Soil Purchase	N/A	--	--	N/A
2.2.1e Transportation	N/A	--	--	N/A
2.2.2 Flexible Membrane Cover	N/A	--	--	N/A
2.2.2 Drainage Layer in Top	N/A	--	--	N/A
2.2.2a Sand Layer	N/A	--	--	N/A
2.2.2b Geotextile Filter Fabric	N/A	--	--	N/A

ITEM	UNIT MEASURE	COST/UNIT	NO. UNITS	TOTAL COST
2.2.2c Geonet/Geotextile Composite	N/A	--	--	N/A
2.3 Erosion Layer Placement	cu yards	2.50	1250	3,125.00
2.4 Native Revegetation	sq. feet	0.015	67,500	1,012.50
2.5 Site Grading and Drainage	lump sum	1000	1	1,000.00
2.6 Site Fencing and Security	N/A	--	--	0.00
2.7 Leachate Collection System Completion	N/A	--	--	N/A
2.8 Completion of Gas Monitoring System	N/A	--	--	N/A
SUBTOTAL				**14,542.50**
10% CONTINGENCY				**1,454.25**
CONSTRUCTION TOTAL				**15,996.75**

ITEM	UNIT MEASURE	COST/UNIT	NO. UNITS	TOTAL COST
3.0 Ground-water Characterization Cost				
4.0 Monitor Well Installation Costs				
4.1 Monitoring Well Installation	N/A	--	--	N/A
4.2 Piezometer and Monitor Well Plugging	Per Well	--	--	N/A
SUBTOTAL				0.00
10% CONTINGENCY				0.00
GROUND-WATER INSTALLATION TOTAL				0.00

Calculation of Total Closure Costs

Engineering Total:	$4,334.00
Ground Water Total:	0.00
Construction Total:	$15,996.75
___% Contract Performance Bond:	included
SUBTOTAL:	$20,330.75
Legal Fees (25% of Subtotal):	5,082.69
TOTAL CLOSURE COSTS:	**$25,413.44**

2.8.2 Post-Closure Costs

The post-closure cost estimates shown in Table 3, below, cover the 30-year post-closure period. It is anticipated that minimal care requirements will be necessary as the site is to be reseeded with native grasses that will not require irrigation or constant, routine maintenance. Anticipated tasks include annual inspections, record keeping, and maintaining cover integrity.

TABLE 3: ESTIMATED POST-CLOSURE COSTS

ITEM		UNIT MEASURE	COST/UNIT	NO. UNITS	TOTAL COST
1.0	Engineering Costs				
1.1	Post-Closure Plan	N/A	--	--	N/A
1.2	Site Inspection and RECORD KEEPING (semi-annual)	Inspection	100.00	60	6,000.00
1.3	Correctional Plans and Specifications (annual)	Hours	65.00	8	520.00
1.4	Site Monitoring (semi-annual)	N/A	--	--	N/A
2.0	Construction Cost	Sq. Feet	0.015	261,360	$3,800
3.0	Leachate Disposal	N/A	--	--	N/A
4.0 Soil Amendment		Acre	11.50	180	**2,070.00**

TABLE 3: ESTIMATED POST-CLOSURE COSTS				
ITEM	UNIT MEASURE	COST/UNIT	NO. UNITS	TOTAL COST
SUBTOTAL				12,390.00
10% CONTINGENCY				1,239.00
TOTAL				13,629.00

Total Estimated Financial Assurance Costs

Closure Cost Total:	$25,413.44
Post-Closure Total:	13,629.00
TOTAL FINANCIAL ASSURANCE:	39,042.44

2.8.3 Financial Assurance Mechanism

The financial assurance plan is outlined below. The total estimated costs for closure and post-closure care are approximately $39,042.44

Sanpete County has established a Trust Fund for closure and post-closure care of the Landfill. The Trust Fund meets the requirements set forth in UAC R315-309(2)(a). Proof of the existence of this Trust Fund and a record of deposit for the first payment representing at least one-fifth of the total estimated costs for closure and post-closure care will be submitted to the Executive Secretary at least 30 days prior to the initial receipt of waste. The Trust will be fully funded within five years of permit approval.

Money deposited in the trust fund will be used exclusively for closure, post-closure care, and corrective action. Guidelines for reimbursements, found in UAC R315-309-2(iv), state:

> *The owner or operator, or other person authorized to conduct closure, post-closure, or corrective action may request reimbursement from the trustee for closure, post-closure, or corrective action costs.*
>
> *1. The request for reimbursement may be granted by the trustee only if sufficient funds are remaining to cover the remaining costs and if justification and documentation of the costs are placed in the operating record.*

2. *The owner or operator shall notify the Executive Secretary that documentation for the reimbursement has been placed in the operating record and that the reimbursement has been received.*

The fund will be evaluated annually and may be adjusted as needed.

PART III - TECHNICAL DATA

3.1 DESCRIPTION OF SITE VICINITY

A scanned copy of part of the most recent Chester, Utah, U.S. Geological Survey (USGS) topographic map of the site area is provided as Attachment 8. This map shows the facility boundary, the property boundary, the latitude and longitude coordinates of the front gate, the land use and zoning of the surrounding areas, any existing utilities and structures within one-fourth mile of the site, surface drainage channels, and the direction of the prevailing winds.

As shown on the USGS map, there are no homes, one power line, and no culinary wells within one-fourth mile of the site boundaries. The Landfill property is zoned PF (Public Facilities). Lands to the north, west, and south are A Zone (Agricultural), while across Highway 89 to the east the lands are SL (Sensitive Lands). Prevailing winds are from the south southwest.

3.1.1 Location Standards

Regulations concerning all new Class IV landfills require that they conform to location standards as listed in UAC R315-305-4(1)(a)(I, ii, and iii).

3.1.1.1 Floodplains

The proposed Landfill is not located in a floodplain.

3.1.1.2 Wetlands

The proposed Landfill is not located in wetlands.

3.1.1.3 Water Levels

Regulations require that the lowest level of waste will be at least five feet above the historical high level of ground water. The requirement is met easily: the water levels in five test borings at the Landfill site encountered ground water at depths ranging from 35 to 46 feet below ground. The deepest trench will be 20 feet deep. A test boring at the west end of the deepest proposed trench disclosed ground water 41 feet below ground level. The lowest level of waste will then be (41 - 20), or 21 feet above the shallowest known ground water level. Ground water is 46 feet below ground level at the east end of the same trench, or 26 feet below the deepest waste.

3.2 ENGINEERING CONSIDERATIONS

3.2.1 Foundation Design Underlying the Facility

The Class IVb Landfill will be constructed on natural soils, north and east of the closed Class II Municipal solid waste Landfill. Materials underlying the proposed Landfill consist of alluvial soils approximately 50 feet thick overlying weathered sandstone and shale bedrock of the Green River Formation.

The alluvial soils are sandy silts and clays, and poorly graded, silty and clayey sands with a little gravel. Engineering properties of the soils, as determined by Bingham Engineering and Tri-State Testing, are included in the Appendix. The soils are easily excavated and stand vertically in existing trenches.

Five test borings constructed by Bingham Engineering in 1995 encountered ground water at depths ranging from 35 to 46 feet below the ground surface. Water bearing strata typically occur in unconsolidated soils five to 10 feet above the weathered bedrock surface.

3.2.2 Trench Design

Areas immediately to the east and north of the recently closed Municipal solid waste Landfill unit will receive Class IVb debris. The eastern area will be used after construction of at least one, twenty-feet deep trench, 300 feet long and 150 feet wide, for initial disposal of C/D waste. Sufficient Landfill space is available for three more similar trenches east of the closed Class II Municipal Landfill, and sixteen additional trenches north of the closed Class II Municipal Landfill, each 300 feet long and 150 feet wide. The design and locations of the proposed trenches are shown on Figures 1, 2, and 3.

3.2.3 Run-On/Run-Off Protection

3.2.3.1 Run-on Protection

The proposed facility is protected from run-on in two ways:

1) The existing Municipal Landfill prism and the proposed Class IVb Landfill are bounded on the north, east, and south by berms constructed to protect the Municipal Landfill prism. The berms were originally constructed as roads, and are nowhere less than 12 inches high and ten feet wide.

2) Run-on from the west side of the proposed Class IVb Landfill is impossible because the entire Landfill area slopes down to the west northwest (bearing 280 degrees) at approximately four (4) percent. The design amount of run-on is determined by the amount of precipitation that would occur after a 25 year, 24 hour storm event of 2.1 inches.

Run-on is further limited by the road bed of U.S. Highway 89 and a parallel, abandoned railroad grade. The railroad grade is an intact barrier to run-on from a point 1.05 miles northeast of the northeast corner of the Landfill property, to the south side of the Landfill gate. The railroad grade has been breached south of the Landfill access road and gate in order to allow storm water to flow to the west, away from the U.S. Highway 89.

North of the Landfill access road and gate, at least four, and perhaps five, 24 inch diameter culverts convey precipitation from the east side of Highway 89 through the railroad grade into pasture lands west of Highway 89. Each culvert is capable of conveying 31.4 cubic feet of water per second at a velocity of 10 feet per second.

The total amount of run-on that could be produced by a design storm east of Highway 89 that might be directed toward the Landfill is much less. The maximum area between the easterly Landfill berms and the drainage divide east of the proposed Class IVb Landfill is 530 acres. The amount of run-on from that area during a 25 year, 24 hour storm would be 11.62 cubic feet per second. In the unlikely event that the road bed and the railroad grade were breached by erosion, the entire run-on would be directed toward the Landfill.

Flow velocity in a vegetated ditch is approximately ten (10) feet per second. The cross-sectional area of a ditch required to transport 11.62 cubic feet per second is therefore only 1.162 square feet. However, it is likely that the velocity of the run-on would be reduced by ponding along Highway 89 and the abandoned railroad right of way.

Assuming a flow velocity of only five (5) feet per second, the cross-sectional area of the ditches impounded by the uphill side of the Landfill berms would have to be at least 2.324 square feet to divert water around the Landfill, or 2.789 square feet to obtain a safety factor of twenty (20) percent.

The existing berms are 12" (one foot) high. The natural slope down from east to west is four percent. Therefore, the width of the ditch formed by the uphill toe of the north-south trending berms and the natural slope is 25 feet, plus one foot from the toe of the berm to the top of the berm, assuming a side slope of 1:1, horizontal to vertical. These dimensions provide a ditch cross-sectional area of 13 square feet, for a safety factor of 459 percent if flow velocity is five (5) feet per second.

In the unlikely event that the velocity of flow in the ditch were reduced to two feet per second, the required cross-sectional area would be 5.81 square feet. The available cross-sectional area is 13 square feet, providing a safety factor of 124 percent.

3.2.3.2 Run-Off Protection

Since no water will be able to "run on" to the Landfill, a run-off system preventing water from leaving the Landfill needs only address precipitation that falls within the proposed Class IVb facility.

Water that could run off to the west will be retained by a three-foot high berm. The berm will be constructed parallel to the western property line. The berm will be designed to retain more than .22 cfs, the amount of run-off that could occur after a 25 year, 24 hour storm event of 2.1 inches of precipitation on 25 acres.

A 25 year, 24 hour storm event could produce localized ponding or erosion on the closed Municipal solid waste Landfill. If this occurs, the closed Landfill will be regraded so that water cannot accumulate there or percolate through the cover material.

The demonstration that the run-on control berms are adequate is presented in paragraph 3.3.2.1. The volumes of run-off for a 25 year, 24 hour storm were calculated with the USDA TR-55 formulas for estimating run-off. Figure 4 is a map showing Landfill slopes as measured with a hand level and compass, and the location of run-on control berms. Figure 5 is a map showing the drainage area, culverts through Highway 89 and the railroad grade, and breaches in the railroad grade south of the Landfill gate.

3.2.3.3 Contingency Plan for Failure of Run-Off Containment System

In the event that the run-off containment system fails due to a storm or accidental breach, the operator shall immediately transport additional cover soils to the breached area of the berm to repair the breach. Soils placed into the breach shall be compacted by the wheels or tracks of the loader used to transport the soils. Solid waste that may have been transported beyond the containment berms shall be collected and placed in the open disposal area.

3.2.4 Fugitive Dust Control

Fugitive dust will be controlled by minimizing excavation of natural vegetation. Filled depressions and units requiring closure will be regraded and revegetated as soon as practicable.

If the above measures do not control the dust and it becomes a problem, the Landfill Operator will request the use of either a county, city, or private water truck in order to lightly moisten the ground with water.

3.2.5 Closure Requirements

Closure design, construction, maintenance, and land use are discussed in Section 2.6, Closure Plan.

Respectfully Submitted for Sanpete Sanitary Landfill Cooperative By:

Gary F. Player
Utah Professional Geologist Number 5280804-2250

C:\Documents and Settings\GARY\My Documents\SANPETE LANDFILLS\CHESTER IVB\FINAL CLASS IVB SUBMITTAL.wpd

ATTACHMENTS

ATTACHMENT 1

FIGURES

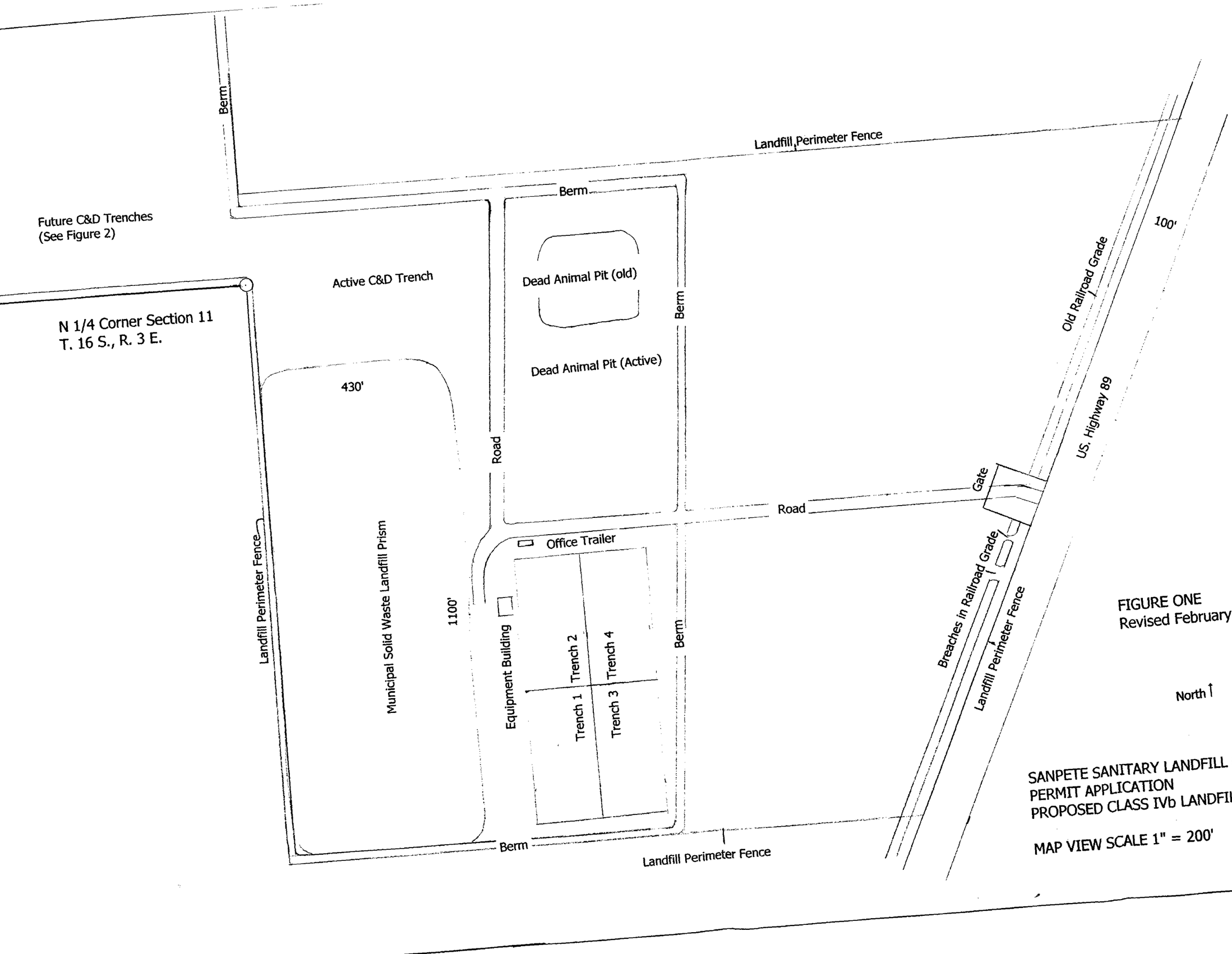


FIGURE ONE
Revised February 21, 2003

North ↑

SANPETE SANITARY LANDFILL COOPERATIVE
PERMIT APPLICATION
PROPOSED CLASS IVb LANDFILL NEAR CHESTER, UTAH

MAP VIEW SCALE 1" = 200'

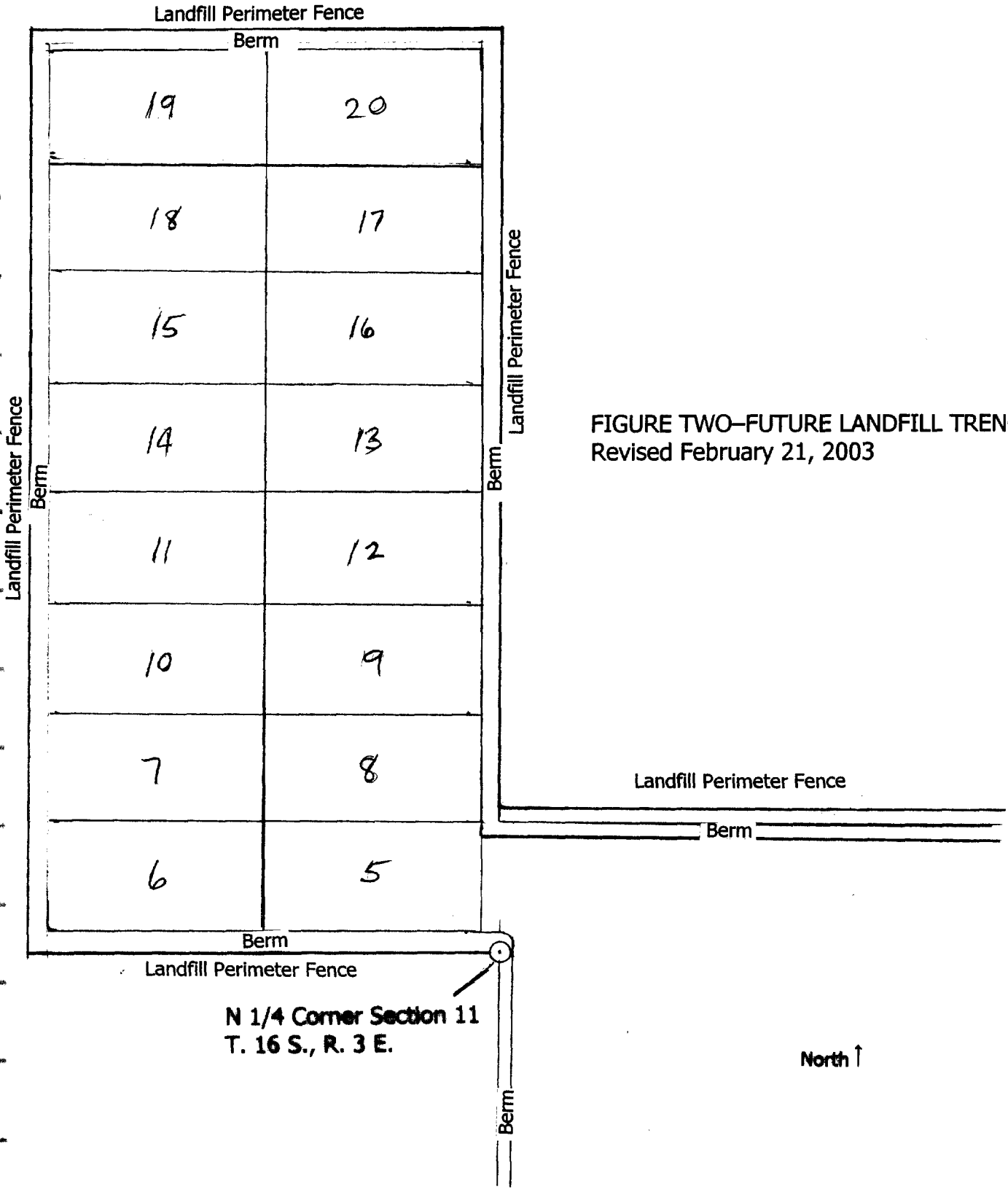
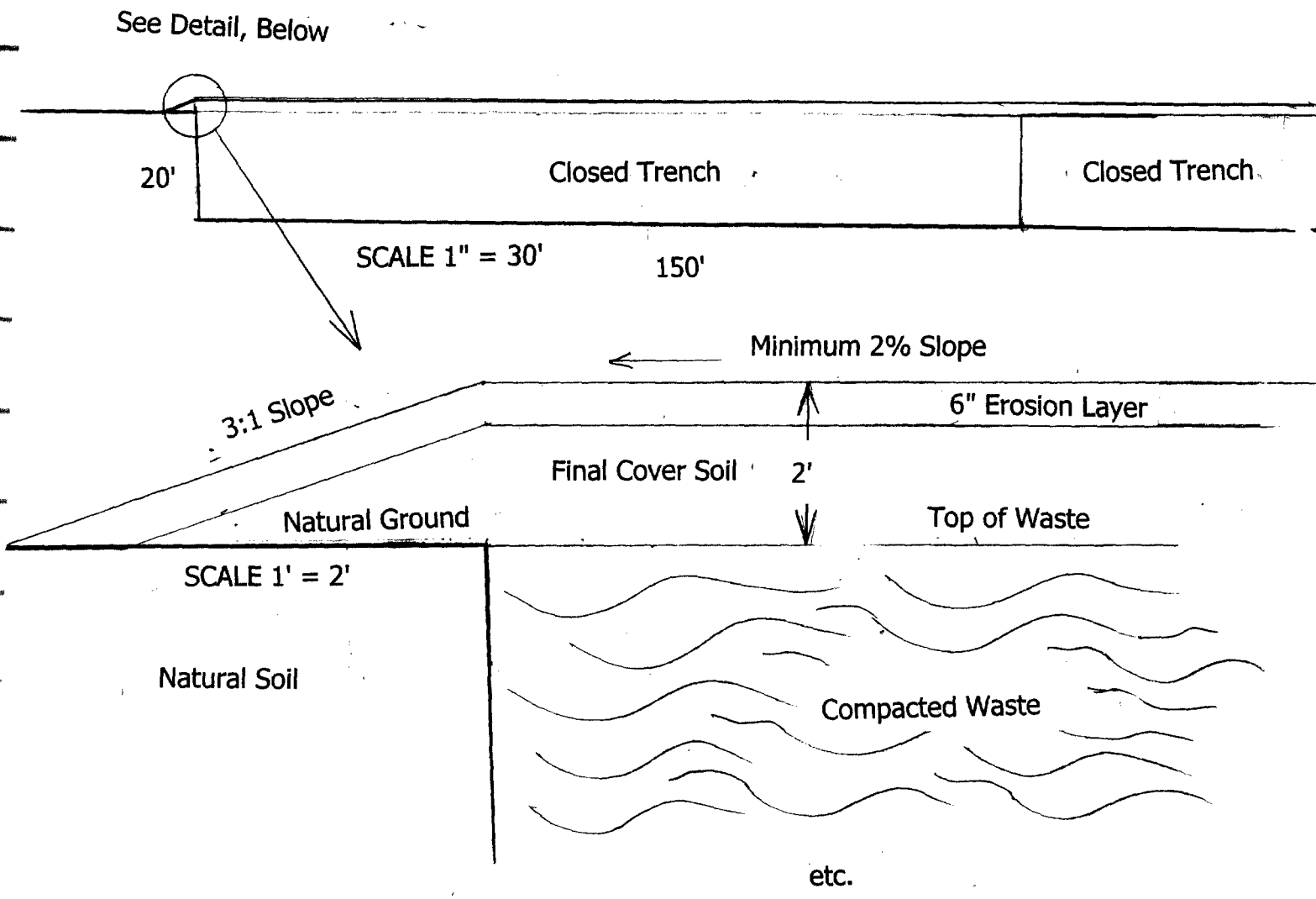


FIGURE TWO–FUTURE LANDFILL TRENCHES
Revised February 21, 2003

SANPETE SANITARY LANDFILL COOPERATIVE
PERMIT APPLICATION
PROPOSED CLASS IVb LANDFILL NEAR CHESTER, UTAH

MAP VIEW SCALE 1" = 200'

SANPETE SANITARY LANDFILL COOPERATIVE
PERMIT APPLICATION
PROPOSED CLASS IVb LANDFILL NEAR CHESTER, UTAH



CROSS SECTION VIEW

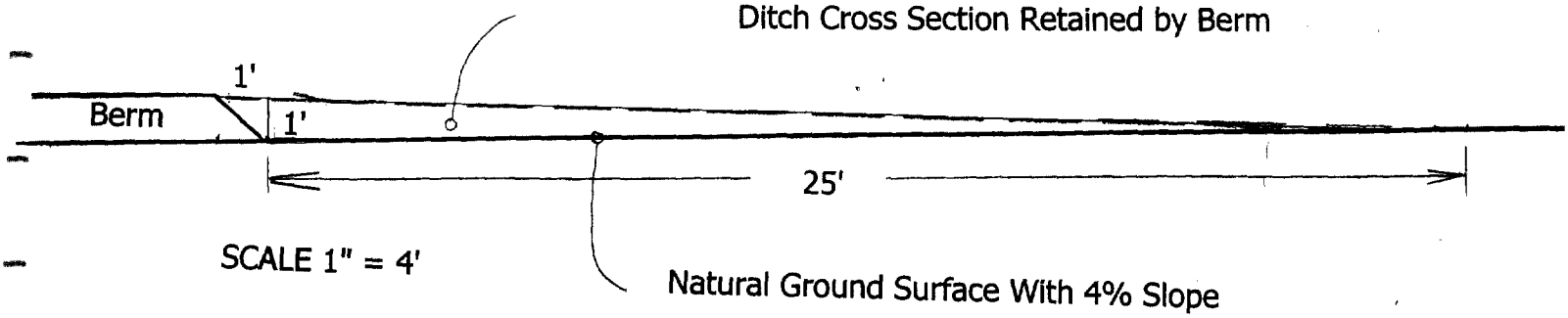


FIGURE THREE–CLOSED CELL AND
RUN-ON CONTROL BERM DETAILS
February 21, 2003

Berm

Slope 4%

Future C&D Trenches
(See Figure 2)

Landfill Perimeter Fence

Berm

Active C&D Trench

Dead Animal Pit (old)

Berm

N 1/4 Corner Section 11
T. 16 S., R. 3 E.

430'

Dead Animal Pit (Active)

Road

Slope 4%

Slope 5%

Old Railroad Grade

100'

US. Highway 89

Gate

Road

Office Trailer

Landfill Perimeter Fence

Municipal Solid Waste Landfill Prism

1100'

Equipment Building

Trench 2

Trench 4

Trench 1

Trench 3

Berm

Breaches in Railroad Grade

Landfill Perimeter Fence

Berm

Landfill Perimeter Fence

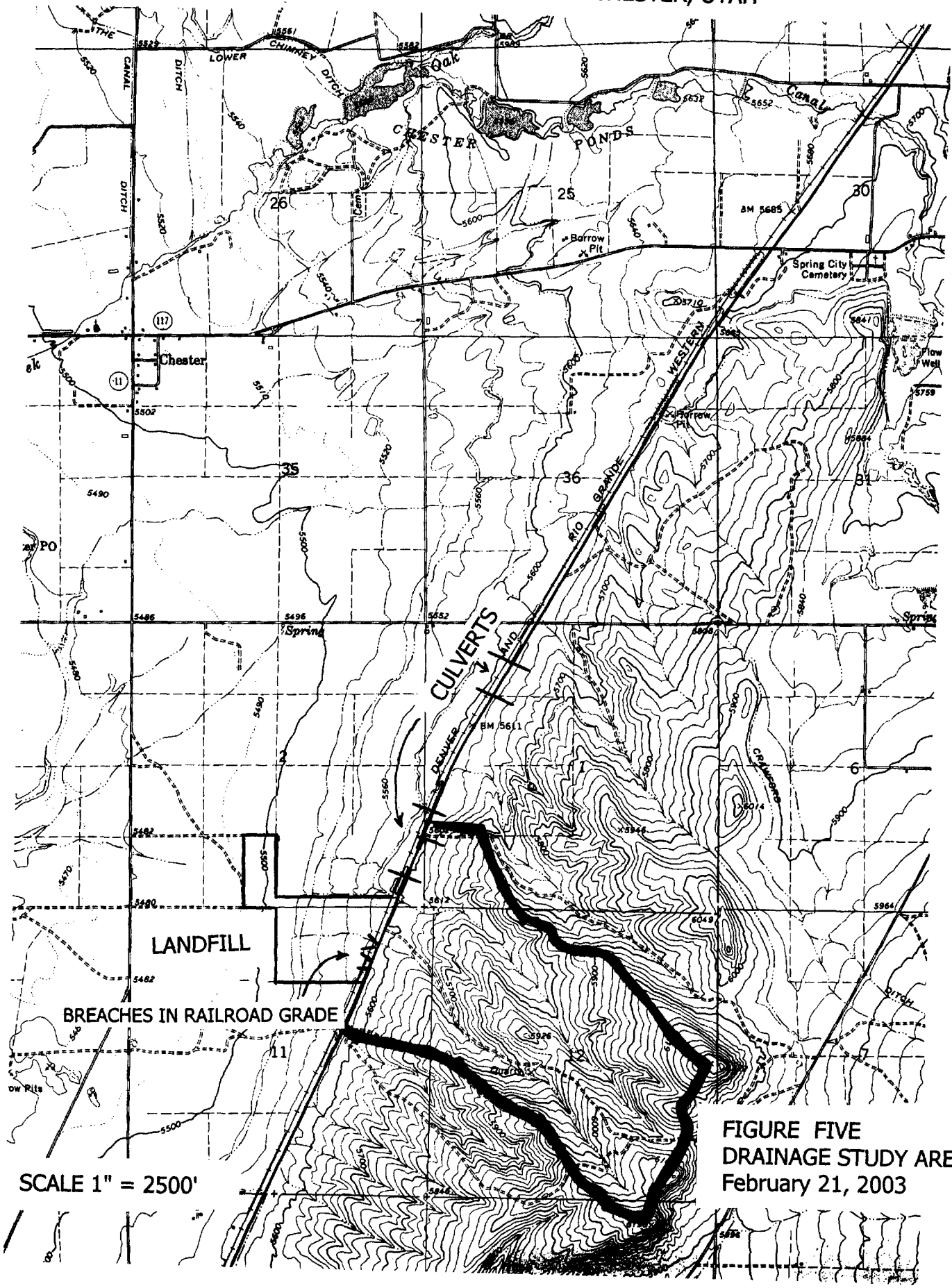
FIGURE FOUR
NOVEMBER , 2003

North

SANPETE SANITARY LANDFILL COOPERATIVE
PERMIT APPLICATION
PROPOSED CLASS IVb LANDFILL NEAR CHESTER, UTAH

MAP VIEW SCALE 1" = 200'

SANPETE SANITARY LANDFILL COOPERATIVE
PERMIT APPLICATION
PROPOSED CLASS IVb LANDFILL NEAR CHESTER, UTAH



SCALE 1" = 2500'

FIGURE FIVE
DRAINAGE STUDY AREA
February 21, 2003

ATTACHMENT 2

PROOF OF OWNERSHIP

00D199

Recorded at Request of _____ ENTRY NO. UK 286 PG 983

at _____ M. Fee Paid $ _____ 1988 MAR 23 PM 2:04 no fee

by _____ Dep. Book _____ Page _____ Request of: Central Utah Title Ref.: _____

Mail tax notice to _____ Address _____ JANET J. LUND SANPETE CO. RECORDER BY _____ DEPUTY

CORRECTION

WARRANTY DEED

2-16-3E-11
11-16-3E-8

DALE C. HALLOCK and GEORGANNE G. HALLOCK, his wife of Gilbert, County of Arizona, State of ~~Utah~~ hereby CONVEY and WARRANT to SANPETE COUNTY grantor

of 160 North Main, Manti, Utah 84642 grantee for the sum of Ten and no/100----------DOLLARS, and other good and valuable consideration the following described tract of land in Sanpete County, State of Utah:

27038

Beginning at the Northwest corner of the East half of the Southeast quarter of the Southwest quarter of Section 2, Township 16 South, Range 3 East, Salt Lake Base and Meridian; thence East 660 feet, thence South 1,105.50 feet, thence East 2,200 feet, more or less, to the West side of the State Highway, thence Southwesterly along the State Highway right of way 231.34 feet, more or less, to the South section line of Section 2, thence West 793.34 feet, more or less, to the 1/16th Section line, thence South 1,320 feet, thence West 1,320 feet, thence North 1,320 feet, thence West 660 feet, thence North 1,320 feet to the point of beginning. Being in Sections 2 and 11, Township 16 South, Range 3 East, Salt Lake Base and Meridian.

EXCEPTING THEREFROM 90% of all oil, gas and/or other minerals in, on or under said land, toghether with the right of ingress and egress for the purpose of exploring for and/or removing the same.

Subject to easements, reservations and restrictions of record or in operation of law and equity.

CENTRAL UTAH TITLE ORDER NO. 3185

* * * *

Note: This instrument is being recorded to correct the legal description in that deed recorded in Book 286 at page 684 wherein the last 2 calls were excluded.

WITNESS, the hand of said grantor, this 18th day of March, A. D. 19 88

Signed in the Presence of

Dale C. Hallock

Georganne G. Hallock

STATE OF UTAH,
County of Sanpete } ss.

On the 18th day of March, A. D. 19 88 personally appeared before me Dale C. Hallock and Georganne G. Hallock

the signers of the within instrument, who duly acknowledged to me that they executed the same.

OFFICIAL SEAL
MICHAEL C. HALLOCK
Notary Public—State of Arizona
MARICOPA COUNTY
My Comm. Expires Sept. 1, 1991

Michael C. Hallock
Notary Public.

My commission expires 9/1/91 Residing in Gilbert, Arizona

WHEN RECORDED, MAIL TO:

.....

.....

.....

000766

ENTRY NO. BK 288 PG 98 No Fee

1988 MAY -4 PM 1:02

REQUEST OF D Land Title
JANET S. LEWIS SANPETE COUNTY RECORDER

Space Above for Recorder's Use

BY ..... DEPUTY

11-16-3E-1

D LAND TITLE
NO. 2-6944

Warranty Deed

(Corporate Form)

GRANTORS N
GRANTEES S

HORSESHOE LIVESTOCK COMPANY, INC. , a corporation organized and existing under the laws of the State of Utah, with its principal office at SALT LAKE CITY , of County of SALT LAKE , State of Utah, grantor, hereby conveys and warrants to

SANPETE COUNTY

of 160 North Main Manti, UT 84642 Grantee
TEN (10) and other good and valuable consideration for the sum of
the following described tract of land in SANPETE DOLLARS,
State of Utah: County,

27207X

Beginning at the Southwest Corner of the Northeast Quarter of the Northeast Quarter of Section 11, Township 16 South, Range 3 East of the Salt Lake Base and Meridian; running thence North 20 chains to the North line of said section; thence East 13.37 chains more or less to the East side of the State Highway; thence Southwesterly along the East side of the Highway to a point on the "40" line East of the point of beginning; thence West to the point of beginning.

LESS HIGHWAY.

The officers who sign this deed hereby certify that this deed and the transfer represented thereby was duly authorized under a resolution duly adopted by the board of directors of the grantor at a lawful meeting duly held and attended by a quorum.

In witness whereof, the grantor has caused its corporate name and seal to be hereunto affixed by its duly authorized officers this 25th day of April A. D., 19 88,

Attest: HORSESHOE LIVESTOCK Company
By

Judith A. Anthony
JUDITH A. ANTHONY Secretary.

William T. Acord
WILLIAM T. ACORD, President.

(Corporate Seal)

STATE OF UTAH,
County of SALT LAKE } ss.

On the 25th day of APRIL 1988, A. D. personally appeared before me WILLIAM T. ACORD and JUDITH A. ANTHONY who being by me duly sworn did say, each for himself, that he, the said WILLIAM T. ACORD is the president, and he, the said JUDITH A. ANTHONY is the secretary of HORSESHOE LIVESTOCK CO., INC. Company, and that the within and foregoing instrument was signed in behalf of said corporation by authority of a resolution of its board of directors and said WILLIAM T. ACORD and JUDITH A. ANTHONY each duly acknowledged to me that said corporation executed the same and that the seal affixed is the seal of said corporation.

Patricia A. Johnson
Notary Public.

My Commission expires 5-18-91 My residence is Manti, Utah

FORM NO. 1016 — WARRANTY DEED CORP. —KELLY CO., 88 W. NINTH SOUTH, S.L.C., UTAH

ATTACHMENT 3

DAILY LOG

SANPETE COUNTY CLASS IVb LANDFILL
DAILY LOG

Operator Name: _____ Date: _____

Time	Hauler Name	Vehicle License #	Waste Description	Estimated Volume (cu yds.)	Fee	Receipt Number

ATTACHMENT 4

RANDOM LOAD INSPECTION RECORD

SANPETE COUNTY CLASS IVb LANDFILL
RANDOM LOAD INSPECTION RECORD

INSPECTION INFORMATION	
Inspector's Name:	
Date of Inspection:	
Time of Inspection:	
TRANSPORTER INFORMATION	
Company Name:	
Address:	
Phone Number:	
VEHICLE INFORMATION	
Driver's Name:	
Vehicle Type:	
Vehicle License Number:	
Description of Waste:	
OBSERVATIONS AND ACTIONS TAKEN	
Photo Documentation: o Yes o No	

Driver's Signature*: _____ Date: _____

Inspector's Signature: _____ Date: _____

*Driver's signature hereon denotes his presence during the inspection, and does not admit, confirm or identify liability.

ATTACHMENT 5

INSPECTION FORM

SIGNATURE LOG

SANPETE COUNTY CLASS IVb LANDFILL INSPECTION FORM

Performed by: _____ Date:_____

Signature: _____ Time:_____

	Overall Condition	
	Satisfactory	**Needs Work***
I. Structures and Roads		
1. Fences	_____	_____
2. Gates	_____	_____
3. Access roads	_____	_____
3. Run-off control systems	_____	_____

*Specify recommended repairs and/or list actions taken: _____

II. Operations		
1. Litter and weed control	_____	_____
2. Waste Piles/Depressions	_____	_____
3. Final cover	_____	_____
4. Daily cover (dead animal pit)	_____	_____
5. Appliance and car body storage area	_____	_____

*Specify recommended repairs and/or list actions taken: _____

III. Other observations and/or corrective action taken: _____

ATTACHMENT 6

ANNUAL REPORT FORM

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF SOLID AND HAZARDOUS WASTE

ANNUAL REPORT FOR A SOLID WASTE DISPOSAL FACILITY

On or before March 1 of each year, the owner or operator of all Class I, II, IVb, and V Landfills, Energy Recovery Facilities, Incinerators, and Land treatment Facilities shall submit an annual report to:

Dennis R. Downs, Director
Division of Solid and Hazardous Waste
Utah Department of Environmental Quality
PO Box 144880
Salt Lake City, Utah 84114 - 4880

PART I - GENERAL DATA

1. Calendar or Fiscal Year -- From _____ to _____
2. Name of Facility _____
3. Site Location _____
4. Facility Owner _____
5. Facility Operator _____
6. Contact Person _____

   Address _____

   _____

   _____

   Telephone _____

7. Type of Facility:

Landfill	Other Facility
( ) Class I	( ) Energy Recovery Facility
( ) Class II	( ) Incinerator
( ) Class IVb	( ) Land treatment Facility
( ) Class V	

8. Status

( ) Currently Operating	( ) Post-closure Care Period

PART II - INFORMATION NEEDED

1. Annual quantity, in tons or volume, of solid waste disposed at the facility. If the data is available, the quantity of solid waste disposed in each category: residential, commercial, and industrial should also be listed.

2.Landfills are also to report the estimated in-place density in pounds per cubic yard of the disposed solid waste.

3.An annual update of the financial assurance for closure and post-closure care of the facility to adjust for inflation or facility modification that may affect the costs of closure or post-closure care.

4.Copies of the results of all ground water monitoring activities completed during the year.

5.Copies of the results of all Landfill gas monitoring activities completed during the year.

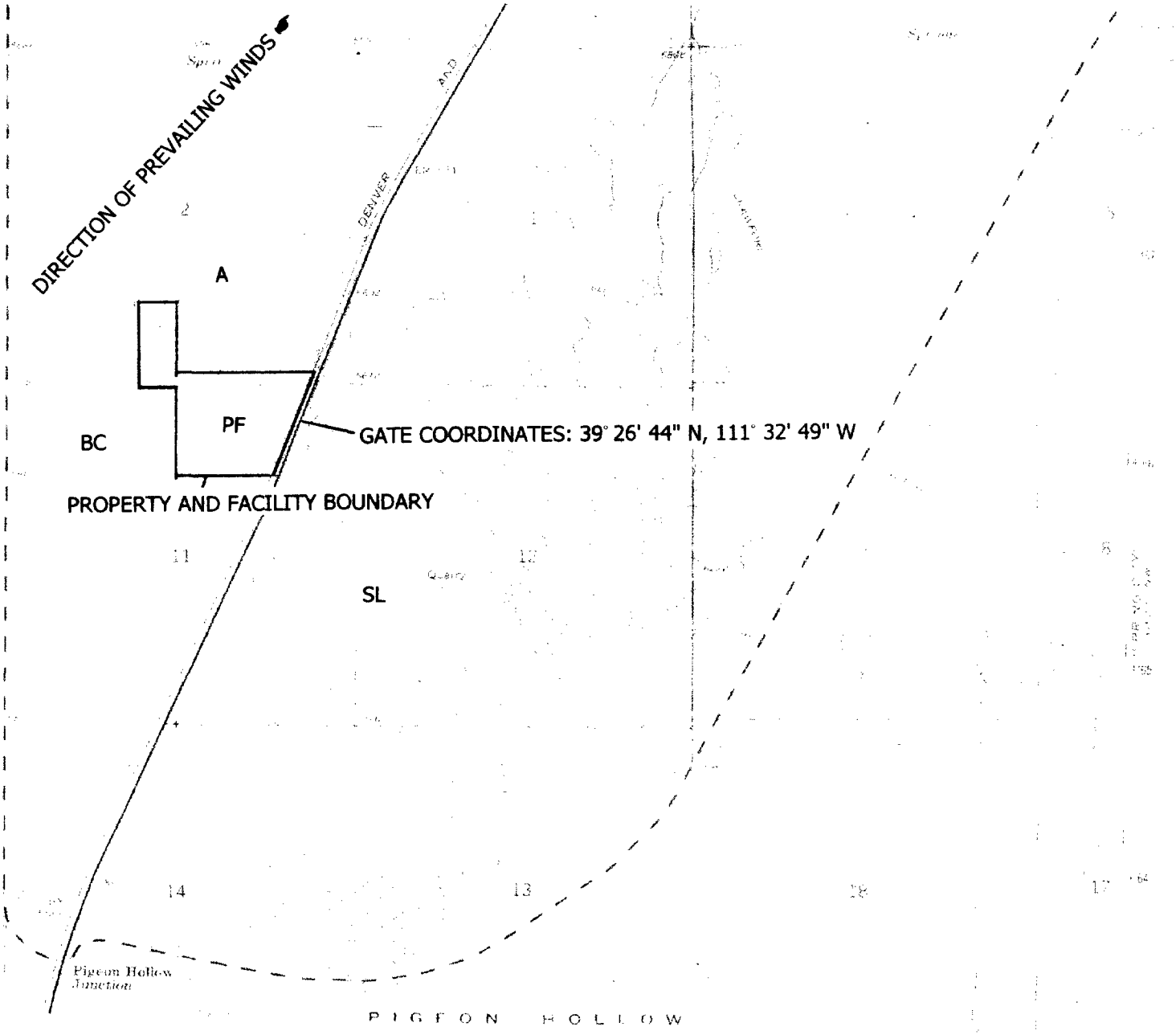
6.A report of all training programs or procedures completed by facility personnel during the year.

ATTACHMENT 7

THIRD PARTY CLOSURE COST ESTIMATE

ATTACHMENT 8

USGS MAP



Attachment 8.

Chester, Utah, U.S. Geological Survey (USGS) topographic map (scanned). This map shows the facility boundary, the latitude and longitude coordinates of the front gate, the land use and zoning of the surrounding areas, and the direction of the prevailing winds.

There are no homes, one power line, and no culinary wells within one-fourth mile of the site boundaries. The Landfill property is zoned PF (Public Facilitities). Most lands to the north, west, and south are A Zone (Agricultural). One parcel formerly used for landfilling by others is zoned BC (business and commercial). Across Highway 89 to the east the lands are SL (Sensitive Lands). Prevailing winds are from the southwest.

SCALE: 1" = 2450' (approximate)